

Having first introduced a full-sized silver sound into the urethra, I then, with a narrow sharp-pointed knife, laid open the sac, and then found three fistulous canals proceeding from the cyst, in a direction downwards towards the perineum, to the extent of three-quarters of an inch, when all three united, becoming one canal, which took a direction immediately backwards, and opened into the urethra, by a single opening rather more than one line in diameter. The next step was carefully to excise my puncture of the sac, and the callous sides of the fistulous canals; I then, with a small cautery-iron, touched the opening in the urethra. For the first few days the cold-water dressing was used, and the bladder regularly emptied with the catheter. The after-dressing was the basilicon ointment, and now and then with a solution of nitrate of silver.

In the course of ten days all discharge from the urethra had ceased; the patient progressed favourably, and on March 16th he was discharged cured.

St. Louis, Missouri, United States, May 1851.

ON WOORRARA POISON.

By A. CAMPBELL, Esq., Surgeon Hp. 55th Regt.

WOORRARA poison, used by the Indians of British Guiana, is a deadly inspissated preparation of a shrub or tree indigenous to Guiana, generally employed for the destruction of game, and procured with extreme difficulty from the aborigines, owing to religious scruples. In this poison the Indian dips his arrow-point, consisting of a small narrow spicula of hard wood, which, conscious of danger, he handles and carries with the utmost care. My experience of it has been by the "*surbee caul*," or Indian blow-pipe.* Experiments prove that the minutest particle of the poison absorbed or entering the circulation of blood instantly suspends the functions of the brain, and all consciousness and sensibility are lost. The functions of respiration cease, or are scarcely perceptible, but the heart continues to pulsate for a short time. If, however, artificial respiration be employed and continued for a time, so as to preserve the purity of the blood, the heart's action will continue, acquiring gradual force, the nervous system will recover its suspended functions, and life will be restored.

This remedy has, therefore, been proposed (I think justly) as a last resort in tetanus, by inserting the poison in the finger, tying a ligature above the wound, so as to regulate its action and effect on the system.

THE PULSE AN IMPORTANT GUIDE IN THE TREATMENT OF DISEASE.

By EDWARD WILLIAMS, M.D., Dublin.

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Few things are more true than the above statement. The pulse is certainly a valuable guide and assistant in forming a correct diagnosis of disease; a fickle and erring companion if taken alone, but of great value when combined with other symptoms. How often have I, in a hurry and guided by general symptoms, laid down antiphlogistic treatment, when the pulse has at once convinced me of my error, inflammation being mistaken for irritation, and tonics and sedatives required, not lowering treatment. Young practitioners especially should well study the pulse, for, not being matured by experience, they will frequently fall into error from the similarity of inflammation and irritation. Fever and pain and depraved secretions are frequently met in both; but in one it is the fever of sympathy and nervous action, not capillary congestion. The pulse should be well studied—1st., in its natural or healthy state; 2ndly, in diseased states of the system; 3rdly, in especial cases; and 4thly, in the two sexes: also in the various stages of life, from the cradle to the grave.

It is only from a knowledge of these facts, that we can treat disease with any degree of skill. Without it, even taking the most favourable view of it, we should be often in the dark, for it is by a combination of symptoms or guides that we can form a correct diagnosis, not by one, two, or three symptoms; and that which when taken alone is of little value, is of great value when combined with other adjuvants.

Cumberland-street, Merrion-square, June, 1851.

* The Indian blow-pipe consists of a narrow, hollow tube, usually made of bamboo, six feet or upwards; into the distal orifice of this tube is introduced the small poisoned arrow; the inserted end sufficiently covered with cotton to render it air-tight. The aim taken, the mouth is applied to the near end, and the air forcibly propelled, which discharges the arrow, so as to wound an animate object at a distance of thirty yards.

A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum, et dissectionum historias, tum aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Prooemium.

ST. BARTHOLOMEW'S HOSPITAL.

Acute Rheumatism, with Cardiac and Ophthalmic Complications.

(Under the care of Dr. ROUPELL.)

WHEN the great number of cases of rheumatic fever which are treated in the hospitals of London, and the serious nature of the affection, are recollected, it will at once become obvious why we have undertaken to present in the "Mirror" a faithful sketch of the various modes of treatment adopted by the physicians of charitable institutions. In former reports, (*THE LANCET*, March 9, 1850; August 24, 1850; Nov. 16, 1850; Feb. 15, 1851; May 24, 1851,) we took a survey of the therapeutical means adopted in uncomplicated cases, these means consisting principally in the administration of colchicum, nitrate and acetate of potash combined, lemon juice, acetate of potash, and citric acid, respectively. We have now to direct attention to the steps of the treatment when cardiac complications are either existing or are suspected. Nor will this account be wanting in interest, as, according to a late authority (Dr. Watson), "one half of the rheumatic patients admitted in the hospitals of London have the heart or its membranes implicated."

And here a question of vital importance arises, namely, whether it would not be advisable in almost all cases gently to affect the gums, seeing that a great amount of mischief may take place in the pericardium and the heart itself, without striking symptoms? This remark might principally apply to that variety of rheumatic arthritis, which has been distinguished by the name of *fibrous acute rheumatism*, which variety is said to affect the parts external to the joint, to be generally accompanied by intense febrile excitement, and in which the tendency towards peri- or endo-cardial inflammation is greater than in the *synovial* variety. Nor should it be forgotten that by far the greater number of patients attacked with acute rheumatism are younger than forty, and that the less advanced in age the more chance there is of carditis becoming developed.

But it might be asked, does bleeding and mercury dispel and efface all the traces of pericardial or endocardial inflammation? The best authorities answer in the negative as regards the complete removal of all traces of the inflammation; but it must be obvious that doing nothing would be worse than having recourse to venesection and mercury, for by these means either the amount of effusion may be lessened, or the extent of the subsequent adhesions greatly diminished. That bleeding carried too far, may, instead of doing good, favour the deposition of warty bodies on the valves, has been satisfactorily shown, but great reliance is generally put in the action of mercury; and in this latter respect we shall in conclusion quote a passage of Dr. Watson's valuable lectures in which the opinion of this physician is strongly expressed. "There are some cases which yield readily to calomel and opium; and in the fibrous disease I think that calomel and opium are the remedies to which, after sufficient bleeding, you will do well to trust. For it is under this character that the extension of the disease to the membranes of the heart is so liable to happen; and if anything can protect the patient against this fearful complication of a malady which, previously attended by no danger, becomes by this addition almost necessarily fatal, or if anything can arrest the carditis before it leaves indelible mischief imprinted on the heart, it is (in my opinion) *mercury*."

CASE 1.—*Rheumatic fever; first attack; endocarditis.*—Elizabeth C—, twenty-five years of age, a servant-girl of pale and delicate complexion, was admitted Nov. 28, 1850, under the care of Dr. Roupell. Patient presents the usual symptoms of acute rheumatism, with pain in the lower part of the chest; a loud systolic bruit is heard at the base of the heart, and there

is increased impulse, with an occasional friction sound; pulse 116, small; menstruation regular.

Dr. Roupell ordered low diet; venesection to twelve ounces; two grains of calomel, and a quarter of powdered opium, three times a day, with draughts of Mindererus' spirit, and small doses of antimony. The patient was bled in the upright posture, without faintness being brought on, but the pulse increased in volume and diminished a little in frequency; the blood being the next morning buffed and cupped.

On the third day, there was less pain in the wrists, knees, ankles, and chest, but the right shoulder became involved; a little mercurial foetor was noticed, and the pulse beat 96. On the eighth day, the symptoms had not much altered, though the medicines were steadily continued; the cardiac impulse had increased, there was still a systolic murmur at the base, and a loud friction sound under the third rib and sternum. The rheumatic pains were now confined to the left leg and right arm, and the mouth being slightly affected on the eleventh day, the mercury was discontinued.

On the thirteenth day, the endocardial murmur had disappeared. The draughts were continued, and one grain and a half of opium taken every night. A systolic murmur at the third intercostal space still persisted; it was heard on the twenty-second day, at which time good diet, bark, and guaiacum, were prescribed. These medicines caused some pain and sickness of stomach; they were therefore replaced by sulphate of magnesia in mint-water, the opium at night being continued. The patient improved rapidly from this time; she was ordered quinine on the thirty-second day, and was discharged two months after admission, quite free from articular pain, the general health much improved, but the systolic bruit at the base of the heart, and heard about the third intercostal space, still persisting.

CASE 2.—*Rheumatic fever; endocarditis; second attack.*—Jane S—, a servant-girl aged twenty-one, was admitted under the care of Dr. Roupell, Oct. 17, 1850, with rheumatic inflammation in the ankles and shoulder, as well as constriction of the chest. A loud blowing sound is heard in all parts of the præcordia, with a marked systolic bruit, and occasional gurgling sound, the blowing and bruit being louder at the base of the heart. Skin hot and dry; pulse 120, full and bounding.

Dr. Roupell ordered venesection to ten ounces; two grains of calomel, one-quarter of tartar-emetic, and one-sixth of powdered opium every sixth hour. The bleeding was performed in the upright posture, and from a free incision; it was attended with considerable improvement in the state of the pulse; signs of syncope were produced, and the blood was considerably buffed next morning.

On the fourth day all the symptoms had abated, the gums were affected, but the bruit and murmur were still very loud, though not quite so much as at first. Patient now took draughts of Mindererus' spirit and antimony, and one grain of opium at night. On the ninth day extensive affection of the mouth, and salivation became manifest. Leeches were applied to the jaws, and the patient used a gargle of chloride of soda. On the 13th day the salivation decreased, the rheumatic pain and fever had quite disappeared, and quinine was ordered. This alkaloid, however, increased the palpitation and pain at the heart; it was therefore replaced by digitalis and sulphate of iron; brandy and beef-tea were allowed, and a few days afterwards the patient began to take bark and guaiacum. She was discharged free from all rheumatic pain five weeks after admission, with some constriction at the chest on breathing deeply, and palpitation on exertion.

CASE 3.—*Rheumatic fever; first attack; iritis.*—Ann H—, a needlewoman of pale countenance, aged twenty-one, was admitted Dec. 19, 1850, under the care of Dr. Roupell. The patient presented the usual symptoms of the affection about the wrist, shoulder, and knee; the catamenia had appeared a week before admission; percussion and auscultation give normal results, and there is no pain at the heart; pulse 90, small and weak; bowels relaxed. Dr. Roupell ordered one grain and a half of opium at night, but the pain being unabated on the next day, six leeches were put to the wrist-joint, draughts of Mindererus' spirit and antimony given every fourth hour, and the opium continued.

On the eighth day the symptoms were more favourable after leeches had been put to the shoulder, where severe pain had sprung up. The patient improved slowly up to the twenty-fifth day, when pain and stiffness still existed in the knee. She was then ordered iodide of potassium in small doses, with sarsaparilla, the opium being increased to two grains at night.

About one month after admission, the woman complained

of uneasiness in the left eye, intolerance of light, and pain. On examination, the usual signs of iritis were observed, and Dr. Roupell ordered calomel and opium, and six leeches to the temporal region. On the second day after the occurrence of the ophthalmic affection, the iris was fixed, and a large quantity of lymph deposited towards the irregular pupil. Some more leeches and extract of belladonna were now prescribed. Meanwhile the pain entirely left the previously affected articulations, a portion of the lymph effused on the iris was absorbed, pain in the organ gave way, and the patient was discharged at her own request, with a rather vascular conjunctiva, being recommended to apply the extract of belladonna night and morning.

CASE 4.—*Acute rheumatism, second attack; endocarditis; pericarditis, and double pneumonia.*—Mary T—, aged forty-five, a washerwoman, was admitted, under the care of Dr. Roupell, Nov. 19, 1850. The first attack occurred seven years ago, without obvious heart affection; the patient has ceased to menstruate, and presents the usual signs of rheumatic fever; pulse 104, full; constriction at the chest; impulse of the heart greater than is normally the case; systolic murmur at the base of the organ. As the face was flushed and the countenance anxious, Dr. Roupell ordered ten grains of calomel and two of opium to be taken at night, and a draught of acetate of ammonia with antimony thrice a day.

On the next day the systolic murmur remained, and a faint to-and-fro sound was audible. The patient was now ordered to be cupped over the region of the heart to twelve ounces, and suddenly all the symptoms of pneumonia unfolded themselves, and continued very intense for some time. Dr. Roupell immediately ordered calomel and opium. On the fourth day the gums became spongy; the mercury was diminished; the pneumonic symptoms, however, remained unaltered, but the heart's impulse became natural, and the systolic murmur diminished.

The patient was on the eighth day fully under the influence of mercury; on the tenth, ulceration within the mouth took place, but the pain in the arms continued, the pulmonary inflammation having now reached the second stage. Dr. Roupell at this point ordered venesection to six ounces, yet the systolic bruit became louder than it had been before, chiefly at the base, and the impulse was more powerful.

On the fifteenth day the wrists were swollen and very painful; ulceration had occurred in the mouth. On the seventeenth day the endocardial murmur was heard plainly in the third intercostal space, and on the twenty-first the pain in the joints began to abate. Beef-tea and brandy had been allowed for a few days previously; leeches and gargles were used for the inflammation and ulceration of the gums. The latter were soon benefited; bark and iodide of potassium were prescribed; the signs of pulmonary consolidation slowly disappeared, and towards the tenth week after admission the patient was getting stronger. She nevertheless complained of a dull continued pain in both shoulders, preventing motion. Dr. Roupell gave her iodide of potassium in extract of sarsaparilla, and chloroform was used as an application to the shoulders. This topical remedy had excellent effects, and the patient was discharged in a very favourable condition about three months after admission.

By glancing at the sketch of the first two cases, it will plainly be seen that our sheet-anchor in cardiac complications has not the power of effacing the traces of the peri- or endo-cardial inflammation; it will, however, be observed how readily the arthritic affection gives way with the free use of mercury. The iritic complication, which happened in the third case, might be looked upon as a sort of metastasis or extension of the disease, for most of the events which characterize inflammation of the fibrous investment of the heart were here manifest. Nor should it be overlooked that the heart did not suffer in this instance, the extension having been confined to the iris, a membrane to which fibro-muscular properties are generally conceded.

The most striking feature of the fourth case seems to be, not that pneumonia supervened on rheumatism, but that the inflammation of the joints, of the heart, and of the substance of the lungs, existed for some time simultaneously. That proximity and sympathy should now and then give rise to pleurisy, when the pericardium is inflamed, is easy to conceive; but there are few examples of a triple phlogosis progressing at the same time, as seen in Dr. Roupell's fourth case.

In examining the records of the cases of rheumatic fever treated by Dr. Roupell since October, 1850, we find that the forty cases which were admitted illustrate in a very interesting manner the notions currently received as to sex, age,

cardiac complications, and the proportion of recoveries. Out of the forty patients, twenty-three were males, and seventeen females.

Under 10 years	...	...	...	...	...	0
From 10 to 15	...	...	...	...	...	3
" 15 " 20	...	...	...	...	...	9
" 20 " 30	...	...	...	...	...	17 (!)
" 30 " 40	...	...	...	...	...	5
" 40 " 50	...	...	...	...	...	5
" 50 " 60	...	...	...	...	...	1

Among the forty cases, twenty-five were affected with cardiac complications:—

Endocarditis	...	...	...	...	...	20
Pericarditis	...	...	...	...	...	0
Endo- and peri-carditis	...	...	...	...	...	5

In three cases of heart affection the lungs were likewise attacked. Of the forty cases, twenty-nine recovered, two died, and nine were, in March 1851, under treatment. We should not omit to note, that one of the two fatal cases was complicated with albuminuria, and the other with endo-pericarditis and pneumonia, accompanied by a large exomphalos, a small femoral hernia, and an attack of peritonitis. In this latter instance the autopsy showed the pericardium universally adherent, and deposits on the aortic valves.

KING'S COLLEGE HOSPITAL.

Aneurism on the Common Carotid Artery; Deligation of the Vessel; Death.

(Under the care of Mr. FERGUSSON.)

OUR readers may remember that the carotid artery was tied some months ago, with perfect success, by Mr. Johnson, at St. George's Hospital, (THE LANCET, July 27, 1850, p. 118.) The deligation of the vessel was here undertaken for the sake of commanding hæmorrhage from the interior of the mouth, brought on by the thrust therein of the point of a parasol. The boy did extremely well, and presented none of the cerebral symptoms which are said sometimes to follow the interrupted supply of blood to the brain.

We have now to put upon record an operation of the same kind, performed upon an adult, for the cure of an aneurism of the carotid artery. Though many methods have by turns been proposed to procure the obliteration of the sac,—as pressure, injection, and galvano-puncture, the results have been so unsatisfactory, that the only means likely to afford permanent relief is the deligation of the vessel on the cardiac side of the tumour. Such deligation seems, however, somewhat hazardous, when so important a trunk as the carotid artery is to be tied; but the cerebral disturbance which might naturally be looked forward to, is in fact very seldom noticed.

It is well known that we are indebted to chance for the discovery of the innocuity of this operation: a surgeon wounds the carotid whilst removing a scirrhus tumour from the side of the face, and to save his patient's life, he ties the vessel, and the case does well. Abernethy was the first, in this country, who attempted the operation; Fleming followed his example, and the deligation of the carotid artery soon became an established and acknowledged operation in surgery. The vessel has been several times tied for the cure of aneurism by anastomosis, or erectile tumours in the cheek or eye: Mr. Travers, Mr. Dalrymple, and Mr. Wardrop, have successfully operated in this country in cases of this nature.

When the deligation is undertaken for the cure of aneurism, it is of course very advantageous that the tumour should be so situated as to allow of the ligature being applied in that portion of the course of the artery which offers the greatest facility for such operation—viz. in the upper triangle of the neck. But aneurismal tumours are sometimes situated so low down, as to leave but very little room between their lower border and the clavicle; here the dissection will of course be longer, and the whole operation require much caution. Dr. Robertson, of Edinburgh, operated in a case of carotid aneurism where the sac was situated low down, and the tumour had burst into the œsophagus; he made his incision to the internal side of the sterno-mastoid muscle only one inch in length, and succeeded in securing the vessel. Mr. Fergusson had to surmount a difficulty of the same kind, as the tumour came close to the clavicle; the artery was, however, laid bare and tied, after a careful dissection, which presented more than usual difficulty.

Mary S—, aged thirty-eight, and unmarried, was admitted June 11, 1851, under the care of Mr. Fergusson, with a swelling on the left side of the neck, presenting several symptoms

of carotid aneurism. The patient has generally enjoyed good health, but has led a dissipated life, and endured great privations. None of her family have suffered from diseased arteries or aneurism. About eighteen months ago she was under treatment at the Westminster Hospital for gangrene of the toes, induced by exposure to wet and cold during two days and nights. Six months since, the patient began to cough, and to experience difficulty of swallowing; about the same time she likewise noticed a small swelling in the course of the carotid artery on the left side, which, however, gave her no pain. The swelling gradually increased to its present size, and the function of respiration became more and more impeded.

On examination, a tumour, about the size of a small fist, tense, pulsating, and tender to pressure, was noticed on the left side of the neck, over the course of the carotid artery. It extended from the base of the jaw nearly to the upper border of the clavicle. No morbid sound of the heart could be detected, but a distinct bruit was heard in the tumour; the general arterial system seemed healthy. The breathing was very difficult. On the third day after admission, the patient became very low and weakly; the dyspnoea was great, as the tumour seemed to press somewhat against the trachea and larynx. The skin over the swelling was becoming very red and tense.

Mr. Fergusson examined the patient just before proceeding with several other operations; and finding her with so much difficulty of breathing, and the tumour threatening to burst, he determined to tie the carotid artery on the cardiac side of the tumour. The patient had become suddenly worse, and this circumstance necessitated prompt measures; but it had been Mr. Fergusson's intention to use appropriate internal remedies before undertaking the operation—a precaution which would certainly in many instances be extremely useful.

No delay could, however, intervene in this instance, for there was every probability of the tumour bursting outwardly, as it presented a highly inflamed spot, or the patient dying from suffocation. When she was brought into the theatre, the question arose whether, in her weak state, the patient should inhale chloroform. Mr. Fergusson thought that the anæsthetic agent should be administered, but with great caution.

When the patient was completely insensible, or nearly so, and the head slightly raised, Mr. Fergusson commenced with a longitudinal incision, about three inches long, to the inner side of the mastoid muscle, from the lower portion of the tumour down along the upper end of the sternum. After the cellular tissue, fascia, and platysma had been divided, the sterno-mastoid came into view, and as here the vessels lay very deep, Mr. Fergusson cut this muscle across. The sterno-hyoid and thyroïd were now carefully divided, as well as some loose cellular tissue, and the sheath of the vessels was perceived. This was cautiously opened upon the director, and the aneurism-needle passed round the carotid artery from without inwards, when the vessel was well secured by a strong thread. Temporary tightening caused the pulsations of the tumour to cease, and when this had been ascertained, the ligature was finally fixed, and the lips of the wound brought together by suture.

No cerebral symptom became manifest after the deligation of the artery, but the pulsations of the radials became much slower; the breathing, which had been very laboured, regained some vigour, and the patient was removed in a comparatively satisfactory state.

Mr. Fergusson took occasion to remark, that he had not expected, when the patient was admitted, to operate so soon, as he intended to afford her eight or ten days' rest and appropriate treatment; but the disease had progressed so rapidly, inflammation had set in so quickly, and the dyspnoea was so great, that if not interfered with, the tumour would have burst either internally or externally. On consultation with his colleagues he had expressed his conviction, and they had agreed, that the vessel should be tied forthwith, though the space between the clavicle and the lower portion of the tumour was very short. The aneurism was probably situated on the upper part of the common carotid, or just at the bifurcation, but to know the exact position was not important as regarded treatment.

He (Mr. Fergusson) had made his incision very long, reaching even over the sternum, as the vessels lie so deep in this locality that plenty of room is very necessary, and on this ground he had divided the sterno-mastoid muscle without hesitation, the more so as this operation is one involving life, and that a muscle was of little importance in comparison. Mr. Fergusson had been somewhat apprehensive of the small veins in that region, in direct communication with the veins of the neck, but the hæmorrhage had altogether been trifling; the jugular